

## Coast Guard, DHS

## § 160.055-5

ring, slide adjuster and snap hook ends shall be welded or brazed, or they may be a one-piece casting. The complete body strap assembly shall have a minimum breaking strength of 360 pounds.

(j) *Coating.* The coating for the plastic foam shall be a liquid elastomeric

vinyl compound. The coating shall be International Orange in color (Color No. 12197 of Federal Standard 595) or Scarlet Munsel 7.5, Red 6/10 and shall meet the following requirements in Table 160.055-3(j):

TABLE 160.055-3(j)

Property	Test method	Requirement
Tensile strength .....	ASTM-D882, Method B, ½ in. dumbbell die .....	1,200 p.s.i., minimum.
Ultimate elongation .....	ASTM-D882, Method B, ½ in. dumbbell die .....	320 percent, minimum.
Tear resistance .....	ASTM-D1004, Constant Elongation Machine .....	90 pounds per inch, minimum.
Abrasion resistance .....	FS CCC-T-191, Method 5304, No. 8 cotton duck, 6 lb. tension, 2 lb. pressure.	100,000 double rubs.
Blocking .....	FS CCC-T-191, Method 5872, 30 minutes at 180 °F., ¼ p.s.i.	No blocking.
Accelerated weathering .....	FS CCC-T-191, Method 5670, 120 hours .....	Color change—very slight. Cracking—None. Flexibility—No change.
Plasticizer heat loss .....	FS CCC-A-700, paragraph 4.4.4, 48 hours at 221 °F.	8 percent, maximum.
Adhesion to foam—Tensile pull .....	ASTM-D413, machine method, 12 in. per minute, 1 in. strip.	
Film to foam skin .....		4 lb./in., minimum.
Film to foam (no skin) .....		2 lb./in., minimum.
Water absorption .....	ASTM-D570, 24 hours at 70 °F .....	0.5 percent, maximum.
Cold crack (unsupported film) 0 °F .....	Coast Guard, 164.015, paragraph 164.015-4(j) ...	No cracking.

[CGFR 66-73, 32 FR 5500, Apr. 4, 1967, as amended by CGD 72-163R, 38 FR 8121, Mar. 28, 1973; CGD 78-012, 43 FR 27153, 27154, June 22, 1978; CGD 84-068, 58 FR 29493, May 20, 1993]

### § 160.055-4 Materials—nonstandard life preservers.

All materials used in nonstandard life preservers must be equivalent to those specified in § 160.055-3 for standard life preservers.

[CGD 72-163R, 38 FR 8121, Mar. 28, 1973]

### § 160.055-5 Construction—standard life preservers.

(a) *General.* This specification covers life preservers which essentially consist of plastic foam buoyant material arranged and distributed so as to provide the flotation characteristics and buoyancy required to hold the wearer in an upright or slightly backward position with head and face clear of the water. The life preservers are also arranged so as to be reversible and are fitted with straps and hardware to provide proper adjustment and fit to the bodies of various size wearers.

(b) *Construction—standard, vinyl dip coated life preserver.* This device is constructed from one piece of unicellular plastic foam with neck hole and the body slit in the front, vinyl dip coat-

ing, and fitted and adjustable body strap.

(1) *Buoyant material.* The buoyant material of the life preserver shall be a molded shape or made from one or two sheets of foam finished so as to have dimensions after coating in accordance with the pattern shown on Dwg. No. 160.055-1A, Sheet 1, for adult size and Sheet 2 for child size. The reinforcing fabric shall be cemented on the foam buoyant body before coating.

(2) *Coating.* After all cutting and shaping of the buoyant body and installation of the reinforcing fabric, the entire body of the life preserver shall be coated evenly and smoothly to a minimum thickness of 0.010" with a liquid vinyl coating material of the type described in § 160.055-3(j).

(3) *Body strap.* After the coating on the buoyant body of the life preserver is fully cured, a nylon webbing body strap shall be attached as shown on Dwg. No. 160.055-1A.

(4) *Stitching.* All stitching shall be a short lock stitch, conforming to Stitch Type 301 of Federal Standard 751, with nylon thread, and there shall be not